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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/217,347	12/21/1998	JOHN G. FIJOLEK	98666	8453

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EXAMINER

KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 04/09/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/217,347

Applicant(s)

FIJOLEK ET AL.

Examiner

Andrew Y Koenig

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 16, 17.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The applicant asserts that DOCSIS does not show, describe or disclose, explicitly or inherently, the elements of new claims 31-66. However, the applicant does not provide any explicit to any limitations except "that interactions with servers and other devices upstream or downstream from the architecture high-speed data-over-cable systems are outside of the scope of DOCSIS. The examiner disagrees in that the claims fail to recite limitations outside the scope of DOCSIS.
2. In addition the applicant argues that, "The intent [of the specification] is for the MCNS operators to transparently transfer IP traffic between these interfaces, including but not limited to datagrams, DHCP, ICMP, and IP Group addressing (broadcast and multicast)." Whereas, the system enables the MCNS operators to transfer IP traffic between interfaces; the claims do not necessitate that an operator controls each of these functions. Accordingly, the claims are broader than that argued by the applicant.
3. The examiner notes that the applicant has broadened the scope of the claims to recite "a data communication system" in lieu of the data-over-cable system

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 31-45, 47-53, 56-58, and 60-66 are rejected under 35 U.S.C. 102(a) as being anticipated by Data-Over-Cable Service Interface Specification (DOCSIS) Radio Frequency Interface Specification (SP-RFI-I04-980724).

Regarding claims 31, 32, 34, 37, 49, 64, and 65, DOCSIS teaches a data-over-cable system with a plurality of network devices, as shown in fig. 1-2. DOCSIS teaches a registration request (claimed first message) transmitted from the cable modem (claimed first network device), which is received by the cable modem termination system, hereinafter CMTS (claimed second network device) (pg. 76-77). DOCSIS shows the registration request including a plurality of service parameters, such as Downstream Frequency Configuration Setting, and Upstream Channel ID Setting, etc (pg. 77). DOCSIS teaches a CMTS creating a registration response message in response to a received registration request (pg. 78, para. 2). Clearly, the CMTS extracts the service parameters from the registration request message in order to appropriately respond to the requests (pg. 79). Clearly, DOCSIS creates a service session profile for the desired service, such as assigning a downstream frequency, or an upstream channel ID to the cable modem, in order to communicate effectively between the CMTS and cable modem. DOCSIS teaches a registration response message with the corresponding service parameters with a MAC service ID (fig. 6-27), where the MAC header activates the service at the cable modem. DOCSIS teaches returning the MAC service ID to the cable modem in the registration response (pg. 78).

Regarding claims 38, 50, 57, 63, and 66, DOCSIS is silent on storing instructions on a computer readable medium for execution by a CPU. Clearly, the method as taught

by DOCSIS is implemented using a computer readable medium for causing a CPU to execute in order to efficiently process the data and instructions.

Regarding claims 39 and 51 DOCSIS teaches a first network device as a cable modem and a second network device cable modem termination system (pg. 76. para. 7-8).

Regarding claims 40, 52, 58, and 61, DOCSIS teaches a SID, which reads on an inactive service identifier as a Medium Access Control (MAC) Protocol Service identifier (fig. 6-27).

Regarding claim 41, DOCSIS teaches a service parameter of class-of-service (pg. 47, sect. 6.1.1).

Regarding claim 42, DOCSIS teaches the first message as a registration request (claimed registration) and a second message as a registration response (pg. 76, 78).

Regarding claim 43, DOCSIS teaches the registration response encoded in Type-Length-Value (TLV) format (fig. 6-27).

Regarding claims 44 and 45, DOCSIS teaches service IDs to support RSVP and RTP protocols, which activate a desired service (pg. 47, sect. 6.1.2.3). The CM requests service from the CMTS to activate RSVP (pg. 121, sect. 9.2.2). The service device located at the CMTS initiates the service (pg. 121, sect. 9.2.2, step 5). As mentioned in the specification, DOCSIS "assumes that the reservation message is accepted by the CMTS." DOCSIS teaches activating the desired service using the SID (pg. 121, step 6), thereby changing the deferred inactive SID into an active SID (pg.

121, step 7). Clearly, a service event is associated with the request in order to forward the necessary packets between devices (pg. 122, step 8).

Regarding claims 47 and 53, DOCSIS teaches authorization and authentication (pg. 108, sect. 7.2.10)

Regarding claims 33, 36, and 48, DOCSIS teaches the use of both dynamic service addition and deletion messages, sent to activate and deactivate services (pg. 121, sect. 9.2.2.) DOCSIS teaches the CM sending a RSPV Path message to the CMTS (pg. 121, step 1), which would deactivate the service. The CMTS deactivates the service and changes the active SID to an inactive SID via the Dynamic service deletion message (pg. 121, steps 5-6). Clearly, a service event is associated with the deactivation request in order to terminate the service (pg. 122, sect. 9.2.2).

Regarding claim 56, the limitations of claim 56 have been addressed in the discussion of claims 31 and 33.

Regarding claims 60 and 62, the limitations of claims 60 and 62 have been addressed in the discussion of claims 31 and 32.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 46 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Data-Over-Cable Service Interface Specification (DOCSIS) Radio Frequency Interface Specification (SP-RFI-I04-980724).

Regarding claims 46 and 54, DOCSIS is silent on teaches a Remote Authentication Dial In User Server (RADIUS). Official Notice is taken that a RADIUS is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DOCSIS RF spec by using a RADIUS in order to support Dial In connections for the users thereby supporting multiple interfaces.

8. Claims 55 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Data-Over-Cable Service Interface Specification (DOCSIS) Radio Frequency Interface Specification (SP-RFI-I04-980724) in view of U.S. Patent 6,337,858 to Petty et al.

Regarding claims 55 and 59, DOCSIS teaches RSVP and RTP protocols, which enable a variety of class of service options, such as peak data rate, etc (pg. 121, sect. 9.2.2). Petty teaches using Voice over Internet Protocol (VoIP) (col. 5, ll. 60-62) via cable modems (col. 6, ll. 21-22). Furthermore, Petty teaches call requests as shown in figures 6-10. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DOCSIS by supporting VoIP as taught by Petty in order to enable the user to have phone conversations without using the Plain Old Telephone Service (POTS) system.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

ayk
April 6, 2003


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
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